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Kootenai Development Company

Flyway Site

Removal Action Work Plan

May 2004 (draft revision 1)

Prepared by:

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Kootenai Development Company

Flyway Site

Removal Action Work Plan

May 2004 (draft revision 1)

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Flyway Site

Removal Action Work Plan

June 2004 (draft revision 2)

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3.1.6 Confirmatory Soil Sampling

Confirmatory Soil Sampling as outlined in the Sampling and Analysis Plan (see Appendix C for the SAP) will be conducted in 2004.

3.1.7 Erosion Control

An Erosion Control Plan was developed by Remedium (see Appendix E). This plan will be followed for activities to be implemented in 2004.

3.1.8 Final Site Restoration

The Flyway site will be restored to a condition similar to what existed prior to soil removal activities. Restoration of the Flyway site includes placing river run gravel in the excavated areas (River Run material) to the approximate original contours.

The Riverbank if impacted will be restored using EPA designated rip-rap.

3.2 Removal Activities

3.2.1 Contractor Mobilization

Contractor mobilization, including decontamination and lavatory facilities shall be similar to those provided in the 2001 construction season. Mobilization shall begin upon notice to proceed by the USEPA (Region VIII) remedial project manager and RAWP approval.

3.2.2 Temporary Facilities

Temporary facilities will include office trailers for project management and the field crew. A trailer will be equipped with the same requirements (telephone, heating, air conditioning, lighting, and ventilation systems, etc.) as described in the Flyway Property Final Removal Action Work Plan, dated August 14, 2001. Portable toilets, temporary water source and fencing shall be set up as outlined in the Flyway Property Final Removal Action Work Plan, dated August 14, 2001 and follow essentially the same procedures that were conducted in the 2001 construction season.

3.2.3 Decontamination Facilities

The removal contractor shall provide personnel decontamination facilities as outlined in the Flyway Property Final Removal Action Work Plan, August 14, 2001 and follow the same procedures that were conducted in the 2001 construction season. Also, see Appendix A for a copy of KEH's HASP.

Equipment decontamination facilities will also be required on the haul road to the mine site (see KEH's HASP, Appendix A; and the Dust Control Plan, Appendix D).

3.2.4 Tree Protection and Removal

Tree protection and removal will follow the same procedures that were conducted in the 2001 construction season and as outlined in the Flyway Property Final Removal Action Work Plan, dated August 14, 2001.

3.2.5 Soil Excavation and Disposal

Fifty-three (53) grids remain to be excavated in 2004. Figure 3-1 shows the approximate limits of soil excavation planned for the 2004 construction season. The excavated soil will be transported by truck to the Libby abandoned mine site and disposed.

3.2.6 Confirmatory Soil Sampling

The Confirmatory Soil Sampling program is described in the Sampling and Analysis Plan (see Appendix C for the SAP) will be conducted in the 2004 construction season, as required.

3.2.7 Transformer Removal and Disposal

A pole mounted transformer is located next to an abandoned pump house.

According to information generated from SunOhio, the transformer does not contain PCB liquids.

In addition, the USEPA sampled soil in the area where the pole-mounted transformer is located.

According to EPA, no PCBs were identified in any of the soil samples.

In light of this information, no PCB soil sampling is proposed in the pole-mounted transformer area.

3.2.8 Transportation and Disposal Considerations

Transport and disposal of contaminated soil from the Flyway site will be conducted by truck to the Libby abandoned mine site. See Appendix D for the Dust Control Plan and Appendix F for the Traffic Control Plan.

3.2.9 Backfilling and Compaction

Backfill material shall meet the requirements outlined in the Flyway Property Final Removal Action Work Plan, dated August 14, 2001. The Flyway site will be graded to the approximate original contours. Existing clean stockpiled material will be used to grade the Flyway site.

3.2.10 Topsoil and Hydroseeding

In accordance with an agreement between the USEPA and Remedium, topsoil and hydroseeding will not be conducted at the Flyway site.

3.2.11 Final Site Restoration

Final restoration of the Flyway site will include erosion control (see Appendix E), removing asbestos contaminated soil to the depths established in the SAP (see Appendix C), furnishing, placing and compacting river run gravel in the 53-grid area, placing rip-rap along the impacted river bank area, and placing granular fill for roadways and restoring the Flyway site to the approximate original contours.

3.2.13 Document Control

Remedium developed a Document Control Plan (see Appendix G). The Document Control Plan will be used to control all documents produced during the Flyway site removal action.

Section 5

Project Schedule

A schedule was developed that shows the proposed work efforts and the timeframe needed to complete these work efforts in 2004.

See Figure 5-1 for the project schedule.

Kootenai Development Company

Flyway Property

Health and Safety Plan

May 2004 (draft revision 3)

Project Number: CERCLA-08-2003-0011

Prepared by:

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Kootenai Development Company

Flyway Property

Health and Safety Plan

May 2004 (draft revision 3)

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1. Water hazards will be addressed in the applicable toolbox safety meeting for that day with all affected workers;
2. Personnel working near the bank of the river will be tied off to stationary objects (e.g., tree, heavy equipment, etc.) at least 10 feet from the banks of the water with safe harnesses; and
3. A portable life preserver will be stationed near the riverbank and will be readily available for use should personnel accidentally fall in the water.

5.2 Dust Control

Throughout surface excavation, and material transport and disposal activities at the Flyway site, the exposed subsurface soils and areas of dust generation will be thoroughly wetted at all times to control dust generation. A water truck will be used throughout these activities supplemented by sprinkler and pressurized hose. Water and, if necessary, magnesium chloride will be sprayed on haul roads. Detailed dust control information can be found in the Dust Control Plan for the Flyway site (see Appendix D of the RAWP).

5.3 Personal Protective Equipment

The level of Personal Protection Equipment (PPE) required at a work site depends not only on existing conditions and hazards, but also on the specific work tasks to be performed. A PPE Hazard Assessment has been conducted for the Flyway project. To avoid or control exposure to potential chemical and physical hazards, personnel will be provided with, and required to use, PPE that is specific to the individual's work tasks and potential work site hazards. The SHSO and PM will ensure that the required PPE (e.g., protective footwear; and head, eye, face, hearing, and respiratory protection) is tested, inspected, and maintained in serviceable and sanitary condition during the course of field activities. Any defective PPE will be discarded or returned to the manufacturer.

The presence of asbestos and airborne dust concentrations in open, well-ventilated areas of Flyway work site where dust suppression is in place, particularly in the breathing space of field personnel, are not expected to exceed PELs (see **Table A-3**). The SHSO, or designee, will monitor the breathing space of field personnel during surface excavation and contaminated material transportation and disposal (see Section 6) to evaluate the need for respiratory protection.

Table A-5 lists the required PPE for each of the work tasks at the Libby site.

These may be modified by SHSO.

In addition to PPE, the following protective equipment will be on site:

- First aid kits with Sawyer Extractor for bites;
- Safety cans;
- Chemical spill kit;
- Lockout/tagout kit;
- Eyewash bottles in every vehicle;
- Fire extinguishers in every vehicle, at fuel areas, and during hot work;
- Tape, barricades, warning signs, and cones; and
- Cellular telephone or other two-way communication system.

**Table A-5
Task-Specific PPE Requirements**

Task	PPE
Mobilization and Site Preparation	Hardhat, safety glasses, steel-toe boots, ear plugs, traffic safety vest, work gloves.
Furnish/Install and Maintain Temporary Storage Areas	Hardhat, safety glasses, steel-toe boots, ear plugs, traffic safety vest, work gloves, body harness and lanyard in aerial lifts.
Transportation to and Disposal at Mine Site	Hardhat, safety glasses, steel-toe boots, ear plugs, traffic safety vest, nitrile surgical gloves, work gloves, polypropylene coverall, rubber boot covers; half-face air purifying respirators (APR) with HEPA cartridges.
Surface Excavation	Hardhat, safety glasses, steel-toe boots, ear plugs, traffic safety vest, nitrile surgical gloves, work gloves, polypropylene coverall, rubber boot covers, half-face air purifying respirators with HEPA cartridges.
Back Fill and Compaction	Hardhat, safety glasses, steel-toe boots, ear plugs, traffic safety vest, work gloves.
Equipment Decontamination in Contaminant Reduction Zone (CRZ)	Rain suit, hardhat, face shield, rubber and steel-toe boots, ear plugs, traffic safety vest, nitrile gloves, polypropylene coverall, rubber boot covers, half-face air purifying respirators with HEPA cartridges.
Hot Work	Welding hood with shaded lenses, welding respirator; flame-retardant clothing, (gloves, chaps, aprons), and hearing protection. No disposable protective clothing (e.g., Tyvek®)

If necessary, NIOSH-approved, half-face air-purifying respirator (APR) with HEPA cartridge will be immediately available at the work sites.

Respiratory protection will be selected and maintained in accordance with the KEHs' respiratory protection program and in conformance with OSHA's revised Respiratory Protection Standard (29 CFR 1910.134). KEH's Respirator Standard Operating Procedure (SOP) form (see Attachment C) will be completed for each job task requiring respirators, prior to task start-up. Each working employee will be fit tested for a proper face piece seal using the qualitative fit test protocol. The employee is then assigned the same NIOSH-

approved brand (MSA, North, 3M, etc.) type (half-face), and size respirator for their use.

Personnel will be required to perform positive and negative fit checks prior to donning the respirator at the beginning of the workday. The SHSC will instruct personnel in proper maintenance procedures, including daily cleaning, inspection, and replacement of cartridges when breathing resistance is encountered.

If conditions are encountered requiring a further upgrade, personnel will evacuate the work site and field activities would be halted until such time as the PM and SHSC establish it is safe to resume work.

Section 6 Air Monitoring

6.1 Background Air Samples

No background air samples are proposed unless specified by the Air Monitoring Manager. Two (2) down wind air samples will be collected from the down wind perimeter of the exclusion zone (EZ) and the air samples will be analyzed by the AHERA TEM method. See **Attachment 2** for the Air Monitoring/Industrial Hygiene Project Plan.

6.2 Daily Air Monitoring

KEH will conduct daily perimeter air monitoring during surface excavation and material disposal to verify that asbestos fibers are not being released. KEH will place portable air sampling pumps along the downwind perimeter of the EZ established for each of these tasks. Air samples will be collected according to NIOSH 7400 method and analyzed by the AHERA TEM method.

During surface excavation, contaminated material transport, and disposal at the mine, the SHSO will collect daily personal air samples for asbestos on workers. The SHSO will collect two daily samples from workers on the ground, heavy equipment operators, and/or haul truck drivers. Samples will be collected on a rotating basis among the jobs but one truck driver will be sampled every day.

6.3 Final Air Monitoring

At the conclusion of the project, KEH will collect air samples at the downwind perimeter of the EZ to confirm the quality of the down wind air from the Flyway site.

6.4 Air Monitoring Summary

Table A-6
Air Monitoring Reference Table

Sample	Sample Location	Test Method	Frequency
Daily Perimeter	Downwind Perimeter of the EZ	AHERA TEM	Each day of field activity
Excavation and Soil Sampling	10% of staff, minimum of 1 personnel in breathing zone	TWA 30 min. excursion personnel air sampling	Each day of excavation or scraping
Final Perimeter	Downwind Perimeter of the Flyway site	AHERA TEM	1 day, TBD*

*TBD - To be determined.

Section 8

Decontamination

The extent of decontamination will depend primarily on the nature and extent of the contamination at a work site. The SHSC can modify procedures, as necessary, thereby adapting them to actual site conditions (e.g., changes in the nature and extent of contamination, PPE level, work tasks, etc.).

8.1 Personnel Decontamination

A negative-pressure personnel decontamination trailer will be provided at the Flyway site for personnel decontamination during surface excavation and contaminated material disposal tasks. The trailer will contain a clean area, showers, and dirty area. All personnel will be required to shower before leaving the site. Tyvek® coveralls worn as outer cover will be disposed of after each use.

All disposable PPE and other equipment will be properly disposed of in 6 mil clear asbestos disposable bags. Any reusable PPE (e.g., outer work gloves, hardhats, safety glasses, rubber boot covers, respirators) that has been in contact with hazardous substances will be decontaminated before being reused.

The following doffing and decontamination sequence will be followed, a flow chart of which will be posted in the decontamination trailer for employees to refer to:

1. Exit EZ through the boot wash outside the decontamination trailer;
2. At the boot wash, clean rubber boot covers using a stiff brush and water;
3. Enter the dirty side of the CRZ decontamination trailer;
4. Remove and hang rubber boot covers on rack provided;
5. Remove outer work gloves, hard hat, safety glasses, traffic safety vest, and steel-toed boots, wipe down with a damp cloth, and set aside on clean shelf or bench;

6. Remove Tyvek® protective coveralls using the inside-out method and place in a lined trash can in the dirty area.
7. Wipe down the outside of the respirator and cartridges (if used), KEEP IT ON;
8. Remove inner surgical gloves and dispose of in lined trash can or plastic bag;
9. Wearing respirator enter shower area carrying work gloves, hardhat, safety glasses, traffic safety vests, and steel-toed boots and place on clean shelf or bench;
10. Shower then remove respirator by loosening straps and gently pulling the respirator over the top of the head leaving cartridges on during the workday but remove cartridges and dispose of in a lined container in the shower area at the end of the shift;
11. Carry respirator, work gloves, hardhat, safety glasses, traffic safety vests, and steel-toed boots to the clean area;
12. Store work gloves, hardhat, safety glasses, traffic safety vests, and steel-toed boots in lockers provided in the clean area;
13. Don street clothes;
14. At the end of the shift disassemble, clean, disinfect, and dry respirator in sink provided in clean area, place in clean plastic bag, and store in locker; and
15. Exit the decontamination trailer.

8.2 Equipment Decontamination

Heavy equipment, haul trucks, and other vehicles that have come into contact with potentially asbestos containing soil or vermiculite, will be decontaminated prior to leaving the Flyway site. A bermed decontamination pad with a high-pressure washer and splash curtains to contain overspray will be provided in the CRZ at the Flyway site. Contaminants and dirt will accumulate within the undercarriage, tracks, sprockets, axles, and tires of equipment and trucks. Consequently, it will be necessary to scrape, broom clean, and pressure wash this equipment before it leaves the CRZ.

Reusable equipment and tools will be cleaned by wash. If reusable sampling equipment is used, it will be decontaminated using a decontamination solution and followed by a series of distilled water rinses.

8.3 Disposition of Project-Derived Wastes

All discarded PPE, equipment, plastic sheeting, and other items will be placed in 6 mil clear asbestos disposal bags for disposal. Spent washwater, rinsewaters, and rinseates will be discharged through a 5.0 micro filter into tanks for subsequent disposal at the mine site. The source will determine the ultimate disposition of these solutions in accordance with state and federal regulatory requirements [Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)]. Decontamination wastewater may be disposed of at the Flyway site disposal area. The Project Manager will ensure that wastes are properly containerized, secured, stored, and disposed.

Kootenai Development Company

Flyway Property

Quality Assurance Project Plan (QAPP)

May 2004 (draft revision 2)

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Quality Assurance Project Plan (QAPP)

May 2004 (draft revision 2)

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Section 2

Background and Purpose

Site background and history are provided in the RAWP and the SAP. The purpose and objectives of the sampling and analysis efforts are discussed in the RAWP and the SAP. The purpose of this QAPP is to provide guidance to ensure that all environmentally related data collection procedures and measurements are scientifically sound and of known, acceptable, and documented quality, and conducted in accordance with the requirements of the project.

2.1 Project Description

A description of this project is provided in the RAWP and SAP. Work efforts will only be conducted in the 53-Grid Area (see Figure 2-1 for the 53-Grid Area).

No work efforts will be conducted in the Riverbank area; this area has already been remediated.

No work efforts will be conducted in the Transformer area. No PCB soil contamination was found in this area, according to EPA's soil sample results.

2.2 Quality Objectives and Criteria for Measurement

This section provides an internal means for control and review of the project, so that environmentally related measurement and data collected are of known and acceptable quality. The data quality objectives (DQOs) and data measurement objectives are addressed below.

In support of the quality objectives and criteria for measurement, the following documents are attached to this QAPP.

Appendix 1

- Request for Modification to the Libby sampling and Quality Assurance Project Plan Field Activities FFO-000000

The EPA will receive copies of all management reports.

Kootenai Development Company

Flyway Property

Traffic Control Plan

May 2004 (draft revision 1)

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3.4 Fuel

Waste transportation vehicles will report fuel levels at the end of each day. Refueling will be conducted while waiting to be loaded at the Flyway site and/or local service stations.

Additional traffic control procedures will be documented in writing as an addendum to this Traffic Control Plan, as required.